

Water System Information

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau *Northrop Grumman Corporation* ntawm 3520 E Ave M, Palmdale, CA 93550 rau kev pab hauv lus Askiv.

Terms Used in This Report

| Term | Definition |
|--|---|
| Level 1 Assessment | A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. |
| Level 2 Assessment | A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions. |
| Maximum Contaminant Level (MCL) | The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water. |
| Maximum Contaminant Level Goal (MCLG) | The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA). |
| Maximum Residual Disinfectant Level (MRDL) | The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants. |
| Maximum Residual Disinfectant Level Goal (MRDLG) | The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants. |
| Primary Drinking Water Standards (PDWS) | MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. |
| Public Health Goal (PHG) | The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency. |
| Regulatory Action Level (AL) | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. |
| Secondary Drinking Water Standards (SDWS) | MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels. |
| Treatment Technique (TT) | A required process intended to reduce the level of a contaminant in drinking water. |
| Variances and Exemptions | Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions. |
| ND | Not detectable at testing limit. |
| ppm | parts per million or milligrams per liter (mg/L) |
| ppb | parts per billion or micrograms per liter (µg/L) |

| Term | Definition |
|-------|--|
| ppt | parts per trillion or nanograms per liter (ng/L) |
| ppq | parts per quadrillion or picogram per liter (pg/L) |
| pCi/L | picocuries per liter (a measure of radiation) |

Sources of Drinking Water and Contaminants that May Be Present in Source Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do

not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Table 1. Sampling Results Showing the Detection of Coliform Bacteria

Complete if bacteria are detected.

| Microbiological Contaminants | Highest No. of Detections | No. of Months in Violation | MCL | MCLG | Typical Source of Bacteria |
|--|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria (State Total Coliform Rule) | (In a month) 2 | 1 | 1 positive monthly sample ^(a) | 0 | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> (State Total Coliform Rule) | (In the year) 0 | 0 | A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive | None | Human and animal fecal waste |
| <i>E. coli</i> (Federal Revised Total Coliform Rule) | (In the year) 0 | 0 | (b) | 0 | Human and animal fecal waste |

(a) Two or more positive monthly samples is a violation of the MCL

(b) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

| Lead and Copper | Sample Date | No. of Samples Collected | 90 th Percentile Level Detected | No. Sites Exceeding AL | AL | PHG | No. of Schools Requesting Lead Sampling | Typical Source of Contaminant |
|-----------------|-------------|--------------------------|--|------------------------|-----|-----|---|---|
| Lead (ppb) | 07/20/2020 | 40 | ND | 0 | 15 | 0.2 | N/A | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 07/20/2020 | 40 | .200 | 0 | 1.3 | 0.3 | N/A | Internal corrosion of household plumbing systems; erosion of natural |

| Lead and Copper | Sample Date | No. of Samples Collected | 90 th Percentile Level Detected | No. Sites Exceeding AL | AL | PHG | No. of Schools Requesting Lead Sampling | Typical Source of Contaminant |
|-----------------|-------------|--------------------------|--|------------------------|----|-----|---|--|
| | | | | | | | | deposits; leaching from wood preservatives |

Table 3. Sampling Results for Sodium and Hardness

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|---|-------------|----------------|---------------------|------|------------|--|
| Sodium (ppm) | 09/23/2020 | 27.25 | 23 - 35 | None | None | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 09/23/2020 | 135 | 45 - 210 | None | None | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

Table 4. Detection of Contaminants with a Primary Drinking Water Standard

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL [MRDL] | | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
|---|-------------|----------------|---------------------|------------|--|--------------------|---|
| Nitrate, as N | 09/23/2020 | 3.13 | ND – 6.1 | 10 | | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Fluoride | 09/23/2020 | .175 | .11 - .28 | 2.0 | | 1 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from |

| | | | | | | | |
|--|--|--|--|--|--|--|---|
| | | | | | | | fertilizer and aluminum factories |
|--|--|--|--|--|--|--|---|

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | SMCL | PHG (MCLG) | Typical Source of Contaminant |
|---|-------------|----------------|---------------------|------|------------|---|
| Specific Conductance (umhos/cm) | 09/23/2020 | 390 | 220 – 530 | 1600 | NONE | Substances that form ions when in water; seawater influence |
| Iron (ug/l) | Quarterly | ND | ND - 150 | 300 | NONE | Leaching from natural deposits; industrial wastes |
| Sulfate (mg/l) | 09/23/2020 | 25.5 | 12 - 37 | 500 | NONW | Runoff/leaching from natural deposits; industrial wastes |
| Copper (mg/l) | 07/20/2020 | .200 | ND – .500 | 1.0 | | |

Table 6. Detection of Unregulated Contaminants

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|---|-------------|----------------|---------------------|--------------------|-------------------------|
| PFBS (ng/L) Perfluorobutanesulfonic Acid | 12/01/2020 | 4 | ND-39 | NONE | |

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Enter Water System's Name] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*:

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

We constantly monitor the water supply for various contaminants. We have detected radon in the finished water supply in 1 out of 5 samples tested. There is no federal regulation for radon levels in drinking water. Exposure over a long period of time to air transmitting radon may cause adverse health effects.

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your State radon program (1-800-745-7236, the U.S. EPA Safe Drinking Water Act Hotline (1 800-426-4791), or the National Safe Council Radon Hotline (1-800-767-7236).

Federal Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

| Violation | Explanation | Duration | Actions Taken to Correct Violation | Health Effects Language |
|-----------|-------------------------------------|-----------|--|---|
| RTCR | > 1 Positive TC result in one month | July 2020 | Immediate re-sampling, public Tier II notification across site | Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. |

For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

| Microbiological Contaminants (complete if fecal-indicator detected) | Total No. of Detections | Sample Dates | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Source of Contaminant |
|---|-------------------------|-----------------|------------|--------------------|-------------------------------|
| <i>E. coli</i> | (In the year) 0 | Sampled Monthly | 0 | (0) | Human and animal fecal waste |
| Enterococci | (In the year) | N/A | TT | N/A | Human and animal fecal waste |
| Coliphage | (In the year) | N/A | TT | N/A | Human and animal fecal waste |

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: NONE

Special Notice for Uncorrected Significant Deficiencies: NONE

Table 9. Violation of Groundwater TT

| Violation | Explanation | Duration | Actions Taken to Correct Violation | Health Effects Language |
|-----------|-------------|----------|------------------------------------|-------------------------|
| 0 | N/A | N/A | N/A | N/A |

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

| | |
|---|---|
| Treatment Technique ^(a) (Type of approved filtration technology used) | NONE |
| Turbidity Performance Standards ^(b) (that must be met through the water treatment process) | <p>Turbidity of the filtered water must:</p> <p>1 – Be less than or equal to [Enter Turbidity Performance Standard to Be Less Than or Equal to 95% of Measurements in a Month] NTU in 95% of measurements in a month.</p> <p>2 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded for More Than Eight Consecutive Hours] NTU for more than eight consecutive hours.</p> <p>3 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded at Any Time] NTU at any time.</p> |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | N/A |
| Highest single turbidity measurement during the year | N/A |
| Number of violations of any surface water treatment requirements | N/A |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a Surface Water TT

Table 11. Violation of Surface Water TT

| Violation | Explanation | Duration | Actions Taken to Correct Violation | Health Effects Language |
|-----------|-------------|----------|------------------------------------|-------------------------|
| N/A | | | | |

Summary Information for Operating Under a Variance or Exemption

N/A

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct 1 Level 1 assessment(s). 1 Level 1 assessment(s) were completed. In addition, we were required to take 4 corrective actions and we completed 4 of these actions.